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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,774	11/01/2000	Neil Jones	594-23292-US	2447

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EXAMINER

MARTIR, LILYBETT

ART UNIT

PAPER NUMBER

2855

DATE MAILED: 01/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/703,774

Applicant(s)

JONES, NEIL

Examiner

Lilybett Martir

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 November 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. New corrected drawings are required in this application because the thickness of the lines utilized in the drawings is too thin and difficult the appreciation of the structures depicted since the photocopies that were provided on November 8, 2001 have significantly faded. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidh et al. (Pat. 5,894,450) in view of Ambs (Pat. 6,002,648). Schmidh et al.

Teaches the claimed invention, including:

- With respect to claim 1, Schmidh et al discloses a hydro dynamically efficient shaped body as in elements 22-26, a propulsion unit as in element 92 located in said body, and a control unit as in element 40 for directional control of said propulsion unit. Schmidh et al. doesn't disclose

a seismic device. Ambs teaches a marine seismic signal generating and detecting device that comprises a seismic device that is a seismic sensor (Col. 6, lines 42-46). One of ordinary skill in the art would have readily recognized the advantages and desirability of providing a seismic device in the sensing apparatus of Schmidh et al. which already comprises sensing devices to further make said apparatus versatile or capable of making plural measurements by plural means.

- With respect to claim 2, Schmidh et al. discloses a navigation unit for directing the control unit to a desired location in the ocean bottom (Col. 5, lines 6-8 and lines 28-35).
- With respect to claims 3 and 13, Schmidh et al. fails to disclose te utilization of a seismic sensor. Ambs teaches a marine seismic signal generating and detecting device that comprises a seismic device that is a seismic sensor (Col. 6, lines 42-46). One of ordinary skill in the art would have readily recognized the advantages and desirability of providing a seismic sensor in the sensing apparatus of Schmidh et al. which already comprises sensing devices to further make said apparatus versatile or capable of making plural measurements by plural means.
- With respect to claims 4 and 14, Schmidh et al. discloses a storage device for storing data sensed (Col. 6, lines 28-31). Schmidh et al. doesn't specifically disclose a seismic device comprising a seismic sensor. Ambs teaches a marine seismic signal generating and detecting

device that comprises a seismic device that is a seismic sensor (Col. 6, lines 42-46). One of ordinary skill in the art would have readily recognized the advantages and desirability of providing a seismic device in the sensing apparatus of Schmidh et al. which already comprises sensing devices to further make said apparatus versatile or capable of making plural measurements by plural means.

- With respect to claim 5, Schmidh et al discloses a control unit 40 receiving navigation commands from a navigation system (Col. 5, lines 6-8 and lines 28-35).
- With respect to claims 6 and 16, Schmidh et al. discloses a control unit communicating an identifier code to the navigation system enabling the navigation system to determine location of the apparatus (Col. 5, lines 5-17).
- With respect to claims 7, 12, 15 and 17, Schmidh et al discloses a navigation system sending a responsive directional command to the apparatus based on the current location and the desired location (Col. 5, lines 5-17 and lines 28-44), inherently receiving said command by means of element 108.
- With respect to claims 9 and 19, Schmidh et al teaches a flight control system for managing a plurality of said apparatuses during navigation (Col. 4, lines 52-55 and Col. 5, lines 5-8 and lines 28-35).

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- With respect to claims 10 and 20, Schmidth et al discloses a flight control system being located on a surface support vessel (Col. 5, lines 52-54).
- With respect to claim 11, Schmidth et al. discloses placing a hydro dynamically efficient shaped body as in elements 22-26 into a fluid above an ocean bottom as shown in Figure 1, energizing a propulsion unit 92 located on said body by means of element 64, and receiving a command by means of element 108 in propulsion unit from a control unit (Col. 5, lines 28-44). Schmidth et al doesn't disclose utilizing a seismic device, said seismic device comprising a seismic sensor. One of ordinary skill in the art would have readily recognized the advantages and desirability of providing a seismic device in the sensing apparatus of Schmidth et al. which already comprises sensing devices to further make said apparatus versatile or capable of making plural measurements by plural means.
- With respect to claims 8 and 18, Schmidth et al. fails to teach the utilization of the propulsion system acting to couple the apparatus to the ocean floor. Ambs teaches a marine seismic signal generating and detecting device that comprises a seismic device that is a seismic sensor (Col. 6, lines 42-46), where the apparatus that comprises said sensor also has propeller means 58, positioning and global control communications antennas 44 and 46, and a hydro dynamically efficient shaped body 12 as noted in Figures 1 and 4. One of ordinary skill in the art would have readily recognized the advantages and desirability of

utilizing the propulsion systems of their apparatuses for merely and specifically coupling the apparatus to the ocean floor, since the teachings of both Inventors do disclose the use of said propulsion devices to propel their devices to pre-determined and chosen positions and therefore said apparatuses are capable of moving to any *pre-determined position*, which could be any, therefore including acting to couple the apparatus to the ocean floor, and therefore it would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize either the mobile underwater arrays system of Schmidth et al. or the marine seismic signal generating and detecting device of Ambis by coupling any of them to the ocean floor to detect any seismic information from a closer range therefore making the measurements made by said device more reliable, versatile and therefore capable of making plural measurements in plural positions.

Response to Arguments

4. Applicant's arguments filed October 17, 2002 have been fully considered but they are not persuasive.
5. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in

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the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the utilization of a specific type of sensing device in a well known oceanographic sampling system which by itself comprises sensing devices to sense ocean parameters or sets of measurable factors is nothing more than expected.

6. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

7. Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

8. In response to applicant's argument that he merely disagrees the obviousness combinations as disclosed, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

9. In response to applicant's argument and allegation that the company Baker Hughes Inc. is the common owner of one of the cited references, the examiner has

found that the Patent 6002648 is owned by companies named Western Atlas International, Inc. and WesternGeco L.L. C., and no evidence has been presented to justify said allegation. Also, the current application does not appear in the list of patents/applications owned by any of the cited companies. A copy of the Patent Assignment Abstract of Title of the present application and the above mentioned patent is being submitted for the applicant to review.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

11. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilybett Martir whose telephone number is (703)305-6900. The examiner can normally be reached on 9:00 AM to 5:30 PM.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (703)305-4705. The fax phone

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numbers for the organization where this application or proceeding is assigned are (703)305-3432 for regular communications and (703)305-3432 for After Final communications.

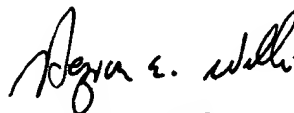
14. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.



Lilybett Martir
Examiner
Art Unit 2855



January 8, 2003



HEZRON WILLIAMS
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